I claim:

1. A method of communicating with a built-in sensor, the sensor receiving a supply voltage externally via a voltage supply line and outputting an output signal with successive signal pulses, the method which comprises the steps of:

placing a sensor into a detection mode;

externally modulating a supply voltage on a voltage supply line connected to the sensor;

analyzing the modulated supply voltage received in the sensor with regard to a fulfillment of a predetermined criterion stored in the sensor; and

interpreting the received modulated supply voltage as an external communication signal if the criterion is fulfilled.

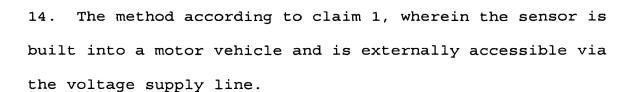
- 2. The method according to claim 1, which comprises outputting with the sensor an output signal having successive logic L and H signal pulses.
- 3. The method according to claim 1, wherein the sensor is a rotational speed sensor and the method further comprises:

supplying the rotational speed sensor externally via a twowire current interface; comparing the modulated supply voltage received in the rotational speed sensor with an associated sensor current; and

interpreting the received modulated supply voltage as an external communication signal if a negative resistance characteristic is ascertained.

- 4. The method according to claim 3, which comprises switching the rotational speed sensor into a communication mode if a negative resistance characteristic is ascertained over a predetermined number of cycles of the sensor output signal of respective L and H signal pulses.
- 5. The method according to claim 4, which comprises, in the communication mode, interpreting each modulation of the supply voltage having a predetermined signal duration and signal magnitude as an external communication signal.
- 6. The method according to claim 5, wherein a logic "1" corresponds to an H pulse with 2/3 period duration and an L pulse with 1/3 period duration.
- 7. The method according to claim 5, wherein a logic "0" corresponds to an H pulse with 1/3 period duration and an L pulse with 2/3 period duration.

- 8. The method according to claim 4, which comprises, in the communication mode, outputting with the rotational speed sensor communication signals on the voltage supply line to an externally accessible terminal.
- 9. The method according to claim 1, which comprises maintaining the supply voltage substantially constant in a case of no communication.
- 10. The method according to claim 4, wherein the rotational speed sensor is connected to and can be supplied externally via a three-wire voltage interface.
- 11. The method according to claim 10, wherein, in the communication mode, outputting with the rotational speed sensor communication signals on the voltage output line to an externally accessible terminal point.
- 12. The method according to claim 1, wherein the sensor is a rotational speed sensor.
- 13. The method according to claim 1, wherein the sensor is a rotational speed sensor built into a motor vehicle and the method comprises measuring a rotary speed of a motor vehicle component.



The method according to claim 1, wherein the sensor is built into a household appliance and is externally accessible via the voltage supply line.